Pasticides Structurally Related to Chlordineform

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The Agency was informed on September 7 by CIBA-Geigy Corp. and Nor-Am Agricultural Products Inc., the manufacturers of chlordimeform (N'-(4-chloro-o-toly1)-N.N-dimethylforumidine), that preliminary toxicological data indicate that chlordimeform may cause malignant tumors in mice. The manufacturers, at the same time, issued a joint recall of the products containing chlordimeform from distributors, dealers and growers.

The finding that chlordimeform may be carcinogenic in mice raises concern about other structurally related pesticides. Chlordimeform is a formamidine R., a class of compounds of which two other pesti-

cides also belong: formetanate hydrochloride, m-(((dimethylamino) methylene)-amino)phenyl-N-methylcarbamate hydrochloride; and N'-(2,4-dimethylphenyl)-N((2,4-dimethylphenyl)imino)methyl)-N-methyl-methaninidamide, (trade names: Basm, Amitraz and U-36509).

Permanent tolerances for residues 66 formetanate hydrochloride have been established on the following commodities:

Bb	at 5 ppm
Peaches	at 4 ppm
Grapefruit	at 3 ppm
Apples	
Pears	at 3 ppm
Plums (fresh prunes)	at 2 ppm
Dried prunes	at 8 ppm (food additive)
Dried citrus pulp	at 10 ppm (food additive)

PP# 3F1375, 4F1419 and 5F1550 and FAP# 3H5025 and 3H5029 proposing tolerances for residues in grapes, almond hulls, hops, apple pomace, raisins, raisin waste and in meat, milk, poultry and eggs are currently being held in abeyance because of problems with the proposed enforcement methods.

No permanent tolerances have been established for residues of BAsm. Toxicology Branch in their review of PP# 6F1817 and FAP 6H5138 concluded that Basm is a carcinogen in mice and denied this request for tolerances (See TOX memo 8/30/76 by William Greear). Temporary tolerances were established for residues on apples and pears pursuant to PP# 5G1558.

Subsequently, pursuant to PPF 6G1718 and PAPF 6H5138 temporary tolerances for residues on apples, pears, apple pomace and meat and milk were also established. The subsequent temporary tolerances have expired as of September 1976 and the proposed reextension held up because of Tomicology Branch's conclusion that Basm is a carcánogen in mice.

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cc: PSO, Formetanate SF, Baam SF, Worthington, RF WH-567:JWORTHINGTON:mer:Rm 108:WSME:X62610:10/6/76 RDI:JGCUMMINGS:10/4/76